

DERWENT-ACC-NO: 2004-641421

DERWENT-WEEK: 200612

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TITLE: Removal of residue, e.g. resist, from substrate surface, comprises applying cleaning solution comprising mixture of aqueous solution of sulfuric acid and hydrofluoric acid with hydrogen peroxide solution, to substrate

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PATENT-ASSIGNEE: APPLIED MATERIALS INC[MATEN]

PRIORITY-DATA: 2003US-450117P (February 25, 2003) , 2003US-0676182 (September 30, 2003)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
TW 200423244 A	November 1, 2004	N/A	000	H01L 021/304
<u>US 20040163681 A1</u>	August 26, 2004	N/A	005	B08B 003/00
WO 2004076605 A1	September 10, 2004	E	000	C11D 003/02

DESIGNATED-STATES: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
TW 200423244A	N/A	2004TW-0103573	February 13, 2004
US20040163681A1	Provisional	2003US-450117P	February 25, 2003
US20040163681A1	N/A	2003US-0676182	September 30, 2003
WO2004076605A1	N/A	2004WO-US03856	February 11, 2004

INT-CL (IPC): B08B003/00, C11D003/02, C11D003/39, C11D007/08, C11D011/00, H01L021/304, H01L021/306

ABSTRACTED-PUB-NO: US20040163681A

BASIC-ABSTRACT:

NOVELTY - Removal of residue from substrate surface comprises mixing an aqueous solution comprising sulfuric acid and hydrofluoric acid with a hydrogen peroxide solution to produce a cleaning solution; applying an aliquot of the cleaning solution to a substrate for a period; and rinsing the aliquot from the substrate surface with water to form a wash solution.

USE - For removing a residue, (e.g. resist, polymeric, silicon, silicon oxide, aluminum, aluminum oxide and particulates of surface matter or substrate

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matter) (claimed) from a substrate surface, useful in semiconductor cleaning processes.

ADVANTAGE - The dilute sulfuric peroxide is maintained with a consistent concentration from one substrate to another. Particles removed from one substrate do not contaminate subsequent substrates.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: REMOVE RESIDUE RESIST SUBSTRATE SURFACE COMPRISE APPLY CLEAN
SOLUTION COMPRISE MIXTURE AQUEOUS SOLUTION SULPHURIC ACID
HYDROFLUORIC ACID HYDROGEN PEROXIDE SOLUTION SUBSTRATE

DERWENT-CLASS: G04 L03 P43 U11

CPI-CODES: G04-B08; L04-C06B2; L04-C09;

EPI-CODES: U11-A10;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2004-230558

Non-CPI Secondary Accession Numbers: N2004-507192